



VOL. XXI.

AUGUSTA, MAINE. THURSDAY MORNING, APRIL 21, 1853.

NO. 17.

MAINE FARMER

"Our Farmer and Countryman, Mr. B. H. M." A GRAPES ON GRAPES.

We wish we knew the name of the man who first discovered and adopted grafting. Thousands have been remembered in history and song for some exploit or discovery that actually has done more hurt than good, but the man to whom the world is indebted for this simple, but great and useful art, is not known. It is probably a very old art, as allusions are made to it in the scriptures. It is undoubtedly more practical at the present day than ever before, and has become a very important branch of business in this country during the spring months.

Everybody should know how to do it. It is not necessary that everybody should practice it, but everybody should know the principles by which it is done. We have been in the habit of giving a chapter on the subject every spring, in order that our farmer boys may have their attention turned to the subject and be induced to practice a little so as to obtain a practical knowledge of the art.

Healthy and vigorous stocks and healthy, young, but well matured scions are necessary to ensure an active connection, and a quick, vigorous growth.

The circulations of the tree are carried on in the inner bark and albumen, or young wood of the tree; and in order to unite the scion and the stock firmly the bark and albumen of the scion and the stock should be put in close contact and kept there until the sap, by flowing from the vessels of the stock into the vessels of the scion, shall deposit wood in and around both, and thus bind them together during life.

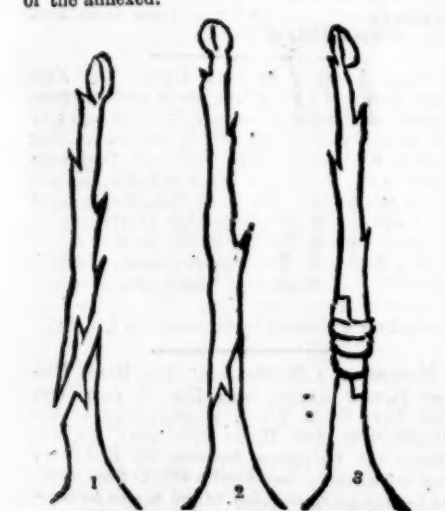
This matching the bark correctly is the first great requisite to success. Any way in which this can be done, and the contact kept up sufficiently long to all or the deposition of wood in and around the junction, will insure the perfect and permanent union of the two. If we have a great variety of kinds or kinds of grafting.

Some of the more common modes we will here enumerate and illustrate by our jack-knife sketches, which, though rough, have been instrumental in conveying to the body's eye and the mind's eye the idea, and taught the craft and mystery of the whole operation.

The most common mode of grafting is called "cleft grafting," because the stock is cleft or split for the purpose of receiving and retaining the scion. In order to do this, saw the stock off as smoothly as possible, and then pare the surface more smoothly with a sharp knife. Then split it in the centre and insert a wedge in order to keep the parts open a short time until you can insert the scion. Then take a scion, which should be a young, thrifty twig, one or two years old, from the kind of fruit which you wish to propagate; cut the end of it in a wedge form and insert it near the outside of the split in the stock in such a manner that the bark of one shall nicely match and fit to the bark of the other. The seam between the bark and wood of the one should exactly fit to the seam between the bark and wood of the other. Some incline the scion a little so as to make the seam of the one cross the seam of the other a little, thinking thereby that actually be a point of contact. This being done, pull out the wedge, and let the parts of the stock press on the wedge part of the scion. The whole junction should then be covered with clay or wax, so as to exclude air and moisture.

This cleft grafting is illustrated by the annexed cut. It is usually performed on stocks that have obtained considerable size.

When you wish to engraft stocks of small size, the method called "spice grafting" is preferable. In order to do this, cut the stock off sloping, so as to have a smooth cut or scarf an inch or two long. About midway of this scarf cut in to the stock a little with your knife. Then take your scion and slope it with a cut in the same manner, so as to have a smooth cut as long as that on the stock; and also with your knife cut in midway as you did in the stock as represented in figure 1 of the annexed.

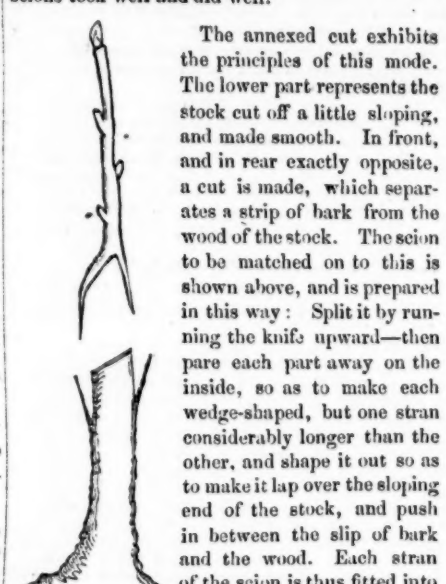


The stock and scion are then ready to match—place them together so that the bark and seam of one side at least shall match nicely together, allowing the tongue made by the notch or cut midway of the slope of the scion to fit into the corresponding cut in the stock, as represented in figure 2.

After having been thus matched together, it is necessary to secure them in this position until a union has taken place. This is easily done

by preparing a piece of cloth with wax, and taking a strip, say half an inch wide and eight or ten inches long, and winding around it as represented in figure 3.

There is another mode of grafting which we denominated straddle grafting. It was first made known to us by Thomas C. Norris, Esq., of Vienna, in this State, who has been very successful in the practice of it. It seems well adapted to use in large or small stocks and scions. Mr. Norris says that he has engrafted stocks in this way that were three inches in diameter, and the scions took well and did well.



The annexed cut exhibits the principles of this mode. The lower part represents the stock cut off a little sloping, and made smooth. In front, and in rear exactly opposite, a cut is made, which separates a strip of bark from the wood of the stock. The scion is to be matched on to this is shown above, and is prepared in this way: Split it by running the knife upward—then pare each part away on the inside, so as to make each wedge-shaped, but one strain considerably longer than the other, and shape it out so as to make it lap over the sloping end of the stock, and push in between the slip of bark and the wood. Each strain of the scion is thus fitted into its respective place in contact with the bark, and held in the usual way by binding down with grafting wax, prepared strips of cloth, or common clay.

We tried this mode last year with good success. We think, however, that where the stock is large, after securing the scion in its place, clay is a better application to it than wax.

GRAFTING COMPOSITIONS. Formerly nothing but clay was used for defending the junction of the scion and stock from the weather; but within a few years grafting wax or composition is now mostly in use.

GRAFTING CLAY. Take pure clay, and mix it with an equal quantity of fine, fresh horse manure, and work in fine hair. If the clay be strong, add a little sand. Beat and work the materials thoroughly together, and apply a ball of the mixture to the stock, completely covering it. If no hair be used, the mixture must be supported by winding around it cloth, tow, &c. Some use less horse manure, and always use sand to reduce the strength of the clay. The proportions must be varied with the nature of the clay. Some is pure and very tenacious, other is weak, being naturally mixed with sand. It is better for being prepared a short time before used, and worked occasionally.

GRAFTING CLOTH. We find, in the Bangor Courier, the following communication, from Col. Little of Bangor, which we copy for the benefit of our readers. The Colonel is an experienced horticulturist, and his recommendation of the process is a guaranty of its being a good one.

"Inquiries are frequently made for the best grafting wax and the recipe for making it. I have procured the recipe for the best article I have ever seen, which was three years since invented by Maj. Chapman of Bangor, which he uses in grafting in his nursery with good and almost sure success. I have used it two years and find it valuable; for it is pliable, easily worked, and it contains nothing that will in the least injure the scion or stock. It should be made precisely according to the following proportions:

Recipe. 6 lbs. Beeswax; 1 lb. Rosin; 1 pint Linseed Oil. (No other oil than linseed should be used.) Melt them well together over a slow fire. Then with a paint brush, spread the wax thinly well warm, on one side of thin but closely woven cloth. Cut the cloth when waxed (lengthwise, as the wax is the strongest) into strips as may be wanted—say half an inch wide and about nine inches long—according to the size of the stock to be grafted.

Grafting can be worked with these strips very readily, as no strings are necessary, and may be very neatly as well as quickly performed. These wax strips may also be used in budding trees."

GRAFTING WAX. The grafting wax is made of tallow, beeswax and rosin, in different proportions. The proportions most commonly used are tallow, one part; beeswax, two parts; rosin, four parts. Melt them well together, and when mingled, pour them into warm water and work them well together by putting a little grease on your hands, or keeping your hands wet, and pulling it and kneading it with the hands as in making shoe-makers' wax, or molasses candy.

Some direct to pour it into cold water, but this is apt to cause little lumps in it, and prevent its becoming uniform in texture.

Mr. Downing recommends three parts of beeswax, three parts rosin and two parts of tallow.

Mr. Yeomans of New York, recommends a composition made as follows: Linseed oil, 1 pint; beeswax, 1 lb.; rosin, 6 lbs. Some who have used this like it well—others condemn it.

We have used a wax made of beeswax, 1 lb.; fir balsam, 1 lb. In order to obtain the balsam, take the bark of the fir tree, clean and boil it, when the balsam can be taken from the surface of the water. It should be free from dirt.

For the Maine Farmer.

KIDNEY COMPLAINT IN HORSES. Mr. Editor:—If any one enquires of you what will help or cure a horse that is troubled with the kidney complaint, or stoppage of the water, you can recommend fir bark, with the same thoroughly, and give the horse one or two quarts of the liquor, or mix it with oats and meal, and give. I have tried this remedy and never had it fail. J. DENNEY. April 11th, 1853.

BOTS IN HORSES.

There are but few bodies, if any, in the animal or vegetable kingdom, that has not some insect to "burrow" in it, and make it a nursing mother to its young. It has been thought by some benevolent souls, that in moderate numbers, such visitors are healthy to the body infested, and that it is their great or unnatural numbers that causes mischief. We have hardly subscribed to this doctrine, although some plausible arguments may be brought forward in favor of this position.

It is not much injured, perhaps none at all, by a few bots in its manure; but that he is benefited by them we can hardly believe.

The bot, which is the larva, or maggot of the bot fly (Oestrus), is a curious and singular specimen of insect life. What singular changes it undergoes. In the first form it is a fly, sailing along with the greatest ease by the side of your horse, on a summer's day, and keeping up with him without any trouble, however swift the horse goes, even to the speed of 240, and ever and anon, darting up and depositing a nit, quicker than you can say "Jack Robinson." Then in the nit form it rides about until it becomes attached in some way to the lips of the horse, when it hatches, and passes down the throat into the stomach of the horse, where it hooks itself to the mucous coat, and is comfortably furnished with warm winter quarters. It continues to grow and pump, and pump and grow, till May or June, when it unhooks itself, and journeying along, is thrown out to the earth, where it lies a short time in the dormant or crystal state, and then bursts its shell, and starts up a perfect fly, and commences its life in the air, and runs races with horses, and deposits eggs on their legs as its ancestors did before.

There is doubt if they often cause the death of the horse. We have seen five instances of horses that had been opened after death, when it was supposed their numbers were either the remote, or proximate cause of the death. Some have thought they eat through the coats of the stomach. This is very doubtful; Dr. Dadd thinks they do not perforate the coats until after the horse is dead.

He also thinks it is idle to give medicine, to cause bots to let go their hold, and indeed, that they are not able to let go themselves, until they have arrived to a stage of growth and maturity, when nature tells them to start for a situation out of doors, to undergo their last transformation.

For the Maine Farmer.

Mr. Editor:—As the season of the year is at hand, when the birds renew their visits for a few months, I thought it would not be out of place to say a few words concerning the "feathered singers," that with their presence make the air "vocal" with their warblings, our homes sweeter and more desirable, and our existence pleasanter and happier. They seem admirably calculated, to cheer up the desponding hearts of men, when cares and troubles have oppressed the mind, and laid low every buoyant and joyful feeling, bidding them still to strive on and exert every power, to throw off the spirit of dreariness and desolation. Who does not love them? Who does not love their coming—for with it they bring the glad intelligence of approaching spring, summer, and autumn; during which seasons man may sow, and reap, and gather together the fruits of his labors, and the rewards of a just Providence, which are so necessary to his temporal existence.

They show, conclusively, to us, the certainty of the existence of a Being, infinitely good and wise, who rules them and us, with the same hand, regulating their return and departure with the regular approach of the vernal and autumnal seasons—consecrating their labors to the good of man, and the perpetuation of their own species. We love to see them about our doors, or hopping nimbly among the branches of some contiguous tree, singing merrily when the sun appears in the east, and again resuming their song when he departs in the west.

To encourage their approach to our habitations, and induce them to stay near us, we should be careful and not do anything that will harm or disturb them, but rather use some means, simple though they be, of keeping them within, at least, bearing distance.

Bluebirds, by a little painstaking, may be learned to build their nests in your dooryard, if it contains a tree in which you can place a box, or what is better a hollow log, or piece thereof, about one foot long, with a hole of four or five inches in diameter. Cover the ends by nailing on a piece of shingle, in order to make a top and bottom; then bore a hole in the side near the top, one and three-fourths in diameter, applying thereto a step or foot rest, and you have a "concern" that will suit the convenience of Bluebirds or Wrens; and the Bank Swallow, even, has been known to occupy such accommodations with perfect satisfaction.

I have known Bluebirds to return year after year, and occupy the same box, and rear their young therein. On one occasion, a mischievous and evil minded cat, put her paw into the box, and maliciously drew forth and devoured the old bird and her young. The remaining bird, nothing daunted at his loss, immediately (as I supposed) went in search of, and shortly after returned with a new mate, whereupon they set to work and raised a second crop, in the same nest; an act not unlike that which certain other creatures occasionally commit, who live in larger boxes than birds.

For the Maine Farmer.

Winthrop, April 4th, 1853.

TO PREVENT MILDEW. Mildew is one of the greatest pests to green houses and all sorts of plant structures. The following remedy has been tried in the house of the London Horticultural Society, and it is thought will prove efficacious: "Sulphur and unslaked lime put into a tub of water in which they are quickly and intimately mixed, and the trees and plants syringed with the clear liquid after the substance has settled at the bottom."

For the Maine Farmer.

Winthrop, April 4th, 1853.

DO BEES MAKE MONEY? Mr. Editor:—Not long since, I noticed an article in the Farmer, copied from some New York publication, taking the affirmative of this question, and seeming to have your approval of the author's views. It being inconvenient to make a reply at the time, I avail myself now of a leisure moment to offer a word or two on the subject, hoping it may be the means of saving a few dollars to those who might possibly be deceived by so plausible a theory. For it is a mere theory, unsupported by a single well established fact, that bees can manufacture honey out of certain factitious food prepared for them and placed before them. They manufacture wax, only. Whatever bees deposit in their cells is the same as when first taken in its natural state, unchanged by any process peculiar to the bee. This fact has long been confirmed by the most acute observers of the habits and instincts of this wonderful insect, and is susceptible of more satisfactory proof than some other matters peculiar to their nature and habits. But these are speculating times, and *Bees-feeding Patents* will have their run, like most other humbugs. The bee itself is the only useful and honest *Hum-Bug* we want; of which, with ordinary care, and aid of government patronage, will give a fair return for fair investment.

For the Maine Farmer.

March 28, 1853.

TROTTER MAC.

"Honor to whom honor is due." I see in the Maine Farmer, of March 31, an account of the famous trotting horse Mac, stating that he was raised in Jay, and after the Ryerson horse. Now, Mac was foaled on Moose Hill, in East Livermore, Kennebec County. He was from a mare belonging to Mr. Thomas Record, and was sired by Pothoby. He took his speed from the dam. JESSE WADSWORTH. Livermore Falls, April 5, 1853.

Mr. Will friend Wadsworth tell us who and what "Pothoby" was? Mac has got his name up pretty well on account of a way he has of putting one foot before the other a little quicker than any other horse, and we want to get the true pedigree of the "critter." Ed.

For the Maine Farmer.

THE KITCHEN GARDEN. BEET. Beet requires a deep, rich and pulverized soil. Sow in drills six inches apart, and when the plants are thinned, they should stand from four to eight inches apart in the drills. The principal crop may be sown about the first of June. We prefer to sow seed enough so that there shall be no necessity for transplanting, as the roots do not grow smooth and straight after being transplanted.

The seed is covered with a thick outer skin, and to soften this, and assist the germinating process, we have found it beneficial to pour hot water on the seed, and let it stand ten or twelve hours before sowing. The plants will come up several days earlier for it. When the soil is light and dry, the garden roller should be passed over the rows, or a board may be placed upon them and pressed down by walking on it. Use the hoe freely, keeping the soil loose and free from weeds. The Blood Turnip-rooted is early and an excellent variety for summer use. There are several varieties which are valuable for later use, among which the common Blood Beet stands deservedly.

CARROT. The most favorable soil for the carrot, says Schenck, is a rich and mellow sandy loam. It should be sown at least two feet deep, and finely pulverized. If not thus prepared, the roots will be found short and forked, instead of long and cylindrical. Should the ground not have been left in good condition by the previous crop, the autumn is the best time for the application of manure, especially, if it be rank and unfermented. The space allotted for the bed ought to be dug over roughly, so as to exert the action of the frost, and the dung buried beneath the bottom spit, by which means, the soil will become sweet and mellow by spring, and the roots will descend to the substratum in search of nutriment instead of throwing out a mass of fibres near the surface.

The seed is to be sown rather thinly in drills, about a foot apart. As the seed is light and apt to cling together, a calm day is more favorable for sowing. Some scatter a few radish seeds in the drills to mark the rows more distinctly for the convenience of weeding before the young plants have attained sufficient size to be readily distinguishable. Cover the seed about half an inch deep, and if the ground is dry press the earth on the rows by means of a board or roller. It will not do to neglect the plants in the early stages of their growth and care and patience will be required in weeding and thinning. They should be thinned out to stand at an average distance of about six inches apart, especially if large roots are desired. The Long Orange and Allington are approved varieties.

PARSNIP. A good sandy loam, rich and of considerable depth, is considered most suitable for the parsnip. The ground should be spaded deep, and the manure worked in thoroughly. Sow in drills a foot apart, cover the seed about an inch deep and if the ground is dry, press the earth on the seed. If the seed is more than a year old, it is not sure to vegetate. As soon as the plants are readily distinguishable, they should be carefully weeded, and after they are firmly established, should be thinned out to stand at an average distance of about six inches apart, especially if large roots are desired. The Long Orange and Allington are approved varieties.

SPRINGING. A good sandy loam, rich and of considerable depth, is considered most suitable for the parsnip. The ground should be spaded deep, and the manure worked in thoroughly. Sow in drills a foot apart, cover the seed about an inch deep and if the ground is dry, press the earth on the seed. If the seed is more than a year old, it is not sure to vegetate. As soon as the plants are readily distinguishable, they should be carefully weeded, and after they are firmly established, should be thinned out to stand at an average distance of about six inches apart, especially if large roots are desired. The Long Orange and Allington are approved varieties.

SPRINGING. A good sandy loam, rich and of considerable depth, is considered most suitable for the parsnip. The ground should be spaded deep, and the manure worked in thoroughly. Sow in drills a foot apart, cover the seed about an inch deep and if the ground is dry, press the earth on the seed. If the seed is more than a year old, it is not sure to vegetate. As soon as the plants are readily distinguishable, they should be carefully weeded, and after they are firmly established, should be thinned out to stand at an average distance of about six inches apart, especially if large roots are desired. The Long Orange and Allington are approved varieties.

SPRINGING. A good sandy loam, rich and of considerable depth, is considered most suitable for the parsnip. The ground should be spaded deep, and the manure worked in thoroughly. Sow in drills a foot apart, cover the seed about an inch deep and if the ground is dry, press the earth on the seed. If the seed is more than a year old, it is not sure to vegetate. As soon as the plants are readily distinguishable, they should be carefully weeded, and after they are firmly established, should be thinned out to stand at an average distance of about six inches apart, especially if large roots are desired. The Long Orange and Allington are approved varieties.

SPRINGING. A good sandy loam, rich and of considerable depth, is considered most suitable for the parsnip. The ground should be spaded deep, and the manure worked in thoroughly. Sow in drills a foot apart, cover the seed about an inch deep and if the ground is dry, press the earth on the seed. If the seed is more than a year old, it is not sure to vegetate. As soon as the plants are readily distinguishable, they should be carefully weeded, and after they are firmly established, should be thinned out to stand at an average distance of about six inches apart, especially if large roots are desired. The Long Orange and Allington are approved varieties.

SPRINGING. A good sandy loam, rich and of considerable depth, is considered most suitable for the parsnip. The ground should be spaded deep, and the manure worked in thoroughly. Sow in drills a foot apart, cover the seed about an inch deep and if the ground is dry, press the earth on the seed. If the seed is more than a year old, it is not sure to vegetate. As soon as the plants are readily distinguishable, they should be carefully weeded, and after they are firmly established, should be thinned out to stand at an average distance of about six inches apart, especially if large roots are desired. The Long Orange and Allington are approved varieties.

SPRINGING. A good sandy loam, rich and of considerable depth, is considered most suitable for the parsnip. The ground should be spaded deep, and the manure worked in thoroughly. Sow in drills a foot apart, cover the seed about an inch deep and if the ground is dry, press the earth on the seed. If the seed is more than a year old, it is not sure to vegetate. As soon as the plants are readily distinguishable, they should be carefully weeded, and after they are firmly established, should be thinned out to stand at an average distance of about six inches apart, especially if large roots are desired. The Long Orange and Allington are approved varieties.

than a clay of a wet, tenacious character. The bean is remarkably tender, and if planted before the ground is sufficiently warm, or if covered too deep, it is very likely to rot in the soil, or, if it does finally germinate, becomes a sickly and unprofitable plant. The first of June in this State is early enough to plant the principal crop, although in a warm and sheltered situation they may be started earlier. Better plant them when they will come forward rapidly than to have them remain in the cold and wet ground six weeks without germinating. A liberal dressing of well rotted manure should be applied either broadcast and worked into the soil, or else in the hill or drill before planting the beans. The bush bean may be planted in drills two feet asunder, two inches apart in the drills, and covered an inch and a half deep. The soil should be kept loose and free from weeds by the frequent use of the hoe. Schenck mentions the following varieties in the order of their succession for the table, as the most valuable for small gardens: the Early Mohawk, the Early Yellow Six Weeks, the Early St. Valentine, the China Red-Eye, the Rob Roy, the Brown Valentine, and the Royal White Kidney Dwarf.

The pole, or running bean, requires more room than the bush bean. The hills should be at least three feet apart each way. Put a liberal supply of compost or old dung in the hill, and if they are raised a little above the average level, it may be all the better. Plant five or six beans in a hill, and cover them about an inch deep with fine soil. We think it well to set the poles at the time the beans are planted. The poles should be eight or ten feet high. Use the hoe frequently, keeping the soil mellow and clean. The "Horticultural" is large, early, and generally considered the best variety. The Red Cranberry is rather smaller and somewhat later. The Wild Goose Bean is smaller still, and is a very prolific variety, generally bearing until frost comes. We consider all these varieties of pole beans, much richer and better than the white bean when dry. The White and Green Lima beans have a high reputation for the table. Schenck says: "The green is preferable on account of size, but as regards the certainty and uniformity of a crop, the White seems to have the advantage. They are both largely cultivated in the vicinity of cities, where they always meet with a ready sale, both when green and when dried."

SPRINKLING. A good sandy loam, rich and of considerable depth, is considered most suitable for the parsnip. The ground should be spaded deep, and the manure worked in thoroughly. Sow in drills a foot apart, cover the seed about an inch deep and if the ground is dry, press the earth on the seed. If the seed is more than a year old, it is not sure to vegetate. As soon as the plants are readily distinguishable, they should be carefully weeded, and after they are firmly established, should be thinned out to stand at an average distance of about six inches apart, especially if large roots are desired. The Long Orange and Allington are approved varieties.

SPRINKLING. A good sandy loam, rich and of considerable depth, is considered most suitable for the parsnip. The ground should be spaded deep, and the manure worked in thoroughly. Sow in drills a foot apart, cover the seed about an inch deep and if the ground is dry, press the earth on the seed. If the seed is more than a year old, it is not sure to vegetate. As soon as the plants are readily distinguishable, they should be carefully weeded, and after they are firmly established, should be thinned out to stand at an average distance of about six inches apart, especially if large roots are desired. The Long Orange and Allington are approved varieties.

SPRINKLING. A good sandy loam, rich and of considerable depth, is considered most suitable for the parsnip. The ground should be spaded deep, and the manure worked in thoroughly. Sow in drills a foot apart, cover the seed about an inch deep and if the ground is dry, press the earth on the seed. If the seed is more than a year old, it is not sure to vegetate. As soon as the plants are readily distinguishable, they should be carefully weeded, and after they are firmly established, should be thinned out to stand at an average distance of about six inches apart, especially if large roots are desired. The Long Orange and Allington are approved varieties.

SPRINKLING. A good sandy loam, rich and of considerable depth, is considered most suitable for the parsnip. The ground should be spaded deep, and the manure worked in thoroughly. Sow in drills a foot apart, cover the seed about an inch deep and if the ground is dry, press the earth on the seed. If the seed is more than a year old, it is not sure to vegetate. As soon as the plants are readily distinguishable, they should be carefully weeded, and after they are firmly established, should be thinned out to stand at an average distance of about six inches apart, especially if large roots are desired. The Long Orange and Allington are approved varieties.

SPRINKLING. A good sandy loam, rich and of considerable depth, is considered most suitable for the parsnip. The ground should be spaded deep, and the manure worked in thoroughly. Sow in drills a foot apart, cover the seed about an inch deep and if the ground is dry, press the earth on the seed. If the seed is more than a year old, it is not sure to vegetate. As soon as the plants are readily distinguishable, they should be carefully weeded, and after they are firmly established, should be thinned out to stand at an average distance of about six inches apart, especially if large roots are desired. The Long Orange and Allington are approved varieties.

SPRINKLING. A good sandy loam, rich and of considerable depth, is considered most suitable for the parsnip. The ground should be spaded deep, and the manure worked in thoroughly. Sow in drills a foot apart, cover the seed about an inch deep and if the ground is dry, press the earth on the seed. If the seed is more than a year old, it is not sure to vegetate. As soon as the plants are readily distinguishable, they should be carefully weeded, and after they are firmly established, should be thinned out to stand at an average distance of about six inches apart, especially if large roots are desired. The Long Orange and Allington are approved varieties.

SPRINKLING. A good sandy loam, rich and of considerable depth, is considered most suitable for the parsnip. The ground should be spaded deep, and the manure worked in thoroughly. Sow in drills a foot apart, cover the seed about an inch deep and if the ground is dry, press the earth on the seed. If the seed is more than a year old, it is not sure to vegetate. As soon as the plants are readily distinguishable, they should be carefully weeded, and after they are firmly established, should be thinned out to stand at an average distance of about six inches apart, especially if large roots are desired. The Long Orange and Allington are approved varieties.

SPRINKLING. A good sandy loam, rich and of considerable depth, is considered most suitable for the parsnip. The ground should be spaded deep, and the manure worked in thoroughly. Sow in drills a foot apart, cover the seed about an inch deep and if the ground is dry, press the earth on the seed. If the seed is more than a year old, it is not sure to vegetate. As soon as the plants are readily distinguishable, they should be carefully weeded, and after they are firmly established, should be thinned out to stand at an average distance of about six inches apart, especially if large roots are desired. The Long Orange and Allington are approved varieties.

SPRINKLING. A good sandy loam, rich and of considerable depth, is considered most suitable for the parsnip. The ground should be spaded deep, and the manure worked in thoroughly. Sow in drills a foot apart, cover the seed about an inch deep and if the ground is dry, press the earth on the seed. If the seed is more than a year old, it is not sure to vegetate. As soon as the plants are readily distinguishable, they should be carefully weeded, and after they are firmly established, should be thinned out to stand at an average distance of about six inches apart, especially if large roots are desired. The Long Orange and Allington are approved varieties.

SPRINKLING. A good sandy loam, rich and of considerable depth, is considered most suitable for the parsnip. The ground should be spaded deep, and the manure worked in thoroughly. Sow in drills a foot apart, cover the seed about an inch deep and if the ground is dry, press the earth on the seed. If the seed is more than a year old, it is not sure to vegetate. As soon as the plants are readily distinguishable, they should be carefully weeded, and after they are firmly established, should be thinned out to stand at an average distance of about six inches apart, especially if large roots are desired. The Long Orange and Allington are approved varieties.

SPRINKLING. A good sandy loam, rich and of considerable depth, is considered most suitable for the parsnip. The ground should be spaded deep, and the manure worked in thoroughly. Sow in drills a foot apart, cover the seed about an inch deep and if the ground is dry, press the earth on the seed. If the seed is more than a year old, it is not sure to vegetate. As soon as the plants are readily distinguishable, they should be carefully weeded, and after they are firmly established, should be thinned out to stand at an average distance of about six inches apart, especially if large roots are desired. The Long Orange and Allington are approved varieties.

SPRINKLING. A good sandy loam, rich and of considerable depth, is considered most suitable for the parsnip. The ground should be spaded deep, and the manure worked in thoroughly. Sow in drills a foot apart, cover the seed about an inch deep and if the ground is dry, press the earth on the seed. If the seed is more than a year old, it is not sure to vegetate. As soon as the plants are readily distinguishable, they should be carefully weeded, and after they are firmly established, should be thinned out to stand at an average distance of about six inches apart, especially if large roots are desired. The Long Orange and Allington are approved varieties.

SPRINKLING. A good sandy loam, rich and of considerable depth, is considered most suitable for the parsnip. The ground should be spaded deep, and the manure worked in thoroughly. Sow in drills a foot apart, cover the seed about an inch deep and if the ground is dry, press the earth on the seed. If the seed is more than a year old, it is not sure to vegetate. As soon as the plants are readily distinguishable, they should be carefully weeded, and after they are firmly established, should be thinned out to stand at an average distance of about six inches apart, especially if large roots are desired. The Long Orange and Allington are approved varieties.

SPRINKLING. A good sandy loam, rich and of considerable depth, is considered most suitable for the parsnip. The ground should be spaded deep, and the manure worked in thoroughly. Sow in drills a foot apart, cover the seed about an inch deep and if the ground is dry, press the earth on the seed. If the seed is more than a year old, it is not sure to vegetate. As soon as the plants are readily distinguishable, they should be carefully weeded, and after they are firmly established, should be thinned out to stand at an average distance of about six inches apart, especially if large roots are desired. The Long Orange and Allington are approved varieties.

THE FIRST ROBIN OF SPRING.

Tam Robin the first of the kingdom of song, And my throne is the bough of the old cherry tree, The spheria of spring bear my mandates along, And the gentle and good are all subject to me.

Glad, glad is the home near whose precincts I stay, A grant to abide I repay with delight; My matin shall cheer it at the close of the day, And my vesper-hymn bless it at coming of night.

I sing to the world my melodious strain, And the heart that is sad the earth's discords among, May turn, with my notes, back to Eden again, I am Robin the first of the kingdom of song.

My sceptre the power of melody sweet, The summer's glad months my rule shall prolong, And its flowery trophies be laid at my feet.

SUBSOIL GARDENING.

"Always do your best, and leave the rest."

Some people are afraid to look below the surface soil, apparently regarding it as a sacred spot that must not be disturbed or intruded upon. Now the fact is, too many of us have long been looking at the surface of things, instead of penetrating into the subsoil below and examining its texture, to see if a mine of wealth be there secreted.

The period has arrived when gardening must commence, and those whose garden plots are underlaid with a stiff, tenacious subsoil, would do well by considering whether some measure might not be taken with it that would render it more certainly productive. It has been demonstrated beyond all doubt, that when a tenacious subsoil is dug and loosened up, without bringing it to the surface, or mixing it with the vegetable mould of the surface soil; if the season is very wet, the water descends into it readily, and the plants are protected from the injury of their food being too much diluted with water; and if a drought comes on, the roots penetrate deeper, and are benefited by the reservoir of moisture which lies below; and the capillary attraction in the earth brings the moisture upwards to the surface, and feeds and refreshes the vegetables. Any way you may fix it, it does much good, like all those good, honest old rules, that work well either end foremost.

The way to work it is to dig a little gutter a spit deep and the width of the spade, along the side of a bed, and throw the surface earth which comes out of it to the other end of the bed which is to be dug, where it will be required for the purpose of filling the trench which will be left at the conclusion of the work. Then begin at one end of this gutter and dig it up, and turn it over in the bottom, from end to end; when this is done, begin and dig in the usual way, turning down the surface soil on to the subsoil which has just been dug; doing this from end to end properly, will leave another gutter, which dig and overturn as before; and so proceed till the bed is all dug two spits deep; the subsoil being topsoil, but none of it being brought up or mixed with the surface mould.

Trenching differs from this in turning the whole over, and bringing the subsoil to the surface; but that would be inexpedient when the vegetable mould was not at least two spits deep, unless the ground should be very heavily manured.

Now what is the objection to putting a garden through this salutary process? None at all, excepting that it will require twice the amount of labor; and this may appear to some a serious objection, but its adoption once in four or five years may be sufficient, unless the soil is very stiff and untractable; and it enables the gardener gradually every year, to extend his diggings a little deeper into the subsoil, and by bringing up to the surface a small portion of it annually, the surface soil is constantly gaining depth, which is a matter of prime importance in obtaining good crops with much greater certainty.

Should it be too serious an undertaking to overturn a whole garden in this way in one season,

